Can You Resist Temptation? The Potential of One-Stop Online Purchasing

Jie Yang

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Signed by the final Examining Committee:

Dr. Pierre-Yann Dolbec Chair

Dr. Pierre-Yann Dolbec Examiner

Dr. Jordan Lebel Examiner

Dr. Lea Prevel Katsanis Supervisor

Approved by Dr. Onur Bodur, Graduate Program Director

Dr. Anne -Marie Croteau, Dean, John Molson School of Business

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Abstract

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This thesis uses the engagement-generation process to examine how social presence and shopping convenience affect consumer participation in a social commerce (s-commerce) context. RED, a novel social commerce app, is used to determine whether different formats of content result in different levels of social presence and whether consumers' purchase intentions varied when exposed to different content. This thesis also suggests methods for improving online purchase methods to increase customer engagement and online purchases. An experimental design was used, and the data was collected from a random sample.

Results suggest that video conveys a higher level of social presence than text, but format does not significantly affect online purchase intention. To increase user engagement on the social commerce platform, marketers can use more text to deliver content and improve the level of purchase convenience at the same time. This improves user purchase intention. This study centers on the interactive effects of social presence and online purchase convenience and opens a new line of research on different formats of content on social commerce platforms.

Key words social commerce; social presence; online shopping convenience; online purchase intention

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1 Introduction

The widespread use of 4G network has opened up consumer communication, optimized consumption patterns, and shortened time spent on consumer decision making. In the era of "all media," consumers are no longer passive recipients of information. The rise of UGC (user-generated content) not only enables consumers to obtain information, but also makes them a producer, processor, and disseminator of information (He & Wang, 2014). Consumers may continuously collect and exchange information and make purchasing decisions based on this information. Consumers are motivated to share information and communicate with each other as well as promote the development of social commerce.

S-commerce has emerged as a new form of e-commerce which involves the use of social media to support user social interactions and purchase activities. Engagement is considered an important element in social commerce context (Herrando, Jiménez-Martínez, & Martín-De Hoyos, 2016). Studies suggest that there are three stages in the engagement-generation process: cognitive, affective, and behavioral (Groeger, Moroko, & Hollebeek, 2016). Online shopping is becoming increasingly popular since consumers now prefer to spend less time shopping (Kumar & Kashyap, 2018). When consumers decide whether they will purchase online, online shopping convenience is a key consideration（Beauchamp & Ponder, 2010; Moeller, Fassnacht, & Ettinger, 2009; Reimers & Clulow, 2009). According to Jiang, Yang, & Jun (2013), there is a positive relationship between online shopping convenience and behavioral intentions.

This paper examines the China-based social commerce app RED. RED is an emerging social commerce platform and is different from traditional forms of social commerce in that it simultaneously combines the social networking feature with an e-commerce feature where users

post and comment for other users and even purchase products in one step. Founded in June 2013, RED was originally a community platform for users to share experience on overseas purchasing. One year later, RED launched the “welfare club” function and began cooperating directly with foreign brands. The welfare club provides users opportunity to purchase products from overseas, such as Lancôme, Channel, Louis Vuitton, etc. At present, it has developed into a dual-network UGC platform with multiple features such as community, cross-border e-commerce and, word-of-mouth sharing. RED relies on consumers’ notes instead of promotion from merchants, which increases promotional reliability. Users publish notes and some high-quality notes will attract users to purchase. At the same time, high quality content forms a complete product reputation database, and it is convenient for users to query (Wang & Du, 2019). The main format of UGC are videos and pictures with text and, when users browse posts, they can find the link to the product with the post. This link can be used to buy the product in the RED store and makes purchasing over RED more convenient.

By May 2019, the number of users of RED exceeded 250 million. As a UGC content platform, 97 percent of RED’s content is produced by its users. RED generates more than 3 billion notes every day and many fields are covered, such as fashion, skin care, color makeup, food and travel (Su, 2019). According to the website "About - App Annie" (2019), RED ranked third as a social networking platform in China and there are no similar apps in other countries over the world. The website also stated that Red also ranked among the top shopping apps.

Users often search for reviews and recommendations on RED before making purchasing decisions, and RED has become an important stop on many Chinese consumers’ pre-purchase journey. They can directly search the products or the brands that interest them and find notes from other users related to the products or the brands. Other users simply use RED for “window

shopping." They search for fashion inspiration for makeup and skin care products. Many young women in China browse the app and watch videos on it for entertainment.

Once open, the app on the phone has three buttons on the top of the screen: Follow, Discover, and Nearby. Follow allows users to keep up with the content from accounts they are following. With Discover, users can explore "random" content generated from all other users. Developments in big data science help users receive contents that aligns with their interests. Nearby shows content from other users in the same physical location. It is especially practical when users on trips as it can help them discover scenic spots, good restaurants, or nearby attractions in a foreign city. At the center bottom, there is a big "+", which encourages users to generate and share their own content—called notes. On the left side of the plus sign, users can go directly to RED's shopping center. Users can search the marketplace for the products they want or browse by category. RED's interface can be found in the Appendix.

Brands can open official brand account to improve brand visibility and interact with potential consumers. They can also use RED as a cross-border e-commerce marketplace to sell products. On the brand homepage, RED users can browse the notes that the brand has posted. Users can also see the posts from other users that have mentioned (@) the brand in their own notes. This feature helps brands to build their relationship with their consumers. If the brand's products are available on RED's marketplace, users can simply click on "Products" to browse the list of goods. A link to the brand's RED store is available in the product description, and users can directly purchase from there. Figure 2 in the Appendix shows the official account of French brand AGATHA on RED. RED's combination of the social networking feature with an e-commerce feature that enables one-stop shopping appears to greatly improve online purchase convenience. RED provides a unique opportunity to study the effects of a new form of social media.

2 Theoretical Background

2.1 Social Commerce

Social commerce as an individual concept was first introduced by Surowiecki (2004), who argued that this form of purchase is beneficial for customers as they can make wiser purchasing decisions by referring to other people's suggestions and by interacting with other users. The scale of social commerce is further expanded by some researchers to additional dimensions: consumers, commercial policy, technology, and information policy (Curty & Zhang, 2011). In recent years, social commerce websites, such as Mogujie (www.mogujie.com), Pinduoduo (www.pinduoduo.com), Tencent Wechat, and Meiriyitao (www.mryitao.cn) have developed rapidly in China. These platforms are not only important references for customers to share shopping experiences and to seek purchase advice but are also good ways for enterprises to publish and promote new products (Zheng, Yu, & Jin, 2017).

It is helpful to provide a general description of s-commerce for the purposes of this study. S-commerce used to be considered as a subset of traditional e-commerce that use social networking sites (SNSs) to support social interaction for the online commercial activities (Nadeem, Juntunen, & Juntunen, 2016). The literature suggests that there is no standard definition of social commerce and prior studies have been inconsistent on the topic (Busalim, Hussin, & Iahad, 2019). Recent research suggests social commerce can be divided into two types: (1) social network sites which have commercial features, such as Facebook and Instagram in western countries and Tencent Wechat and Sina Weibo in China; and (2) traditional e-commerce platforms that include comment features, such as Amazon and eBay (Busalim, Hussin, & Iahad, 2019). Social commerce can be described as an emerging category of e-commerce based on social network technologies that uses a user-based business form which features socialization and massive UGC to help consumers in

make purchase decisions (Yin, Wang, Xia & Gu, 2019). Social commerce is also a potential business model shift in e-commerce as there is increasing inquiry by both practitioners and researchers (Zhou, Zhang, & Zimmermann, 2013). The surging intensity in commerce competition challenges the sustainability of the social commerce industry, thus studying social commerce is crucial to the sustainable development of such a business model.

2.3 The Definition of Customer Engagement

Customer engagement is a widely used concepts in marketing research and it has been extensively studied from different perspectives (Hur, Kim, Karatepe, & Lee 2017). Furthermore, customer engagement undoubtedly affects customer purchase intention in social commerce (Prentice, Han, Hua, & Hu 2019). Customer engagement has been identified as a key area in consumer research, and it was a research priority of MSI from 2010–12; MSI considers customer engagement as "customers' behavioral manifestation toward a brand or firm beyond purchase" (MSI 2010, p.4). For this study, customer engagement is defined as the degree that a customer involved in a social commerce platform RED and attachment towards RED that integrates the cognitive, affective, and behavioral stages.

2.4 The Process of Engagement-generation

Studies show there are three dimensions in the engagement-generation process: cognitive, affective, and behavioral (Groeger, Moroko, & Hollebeek, 2016). sPassion developed as a result and has been defined as a user's positive feelings towards a social commerce website through interaction and socialization, leading to users' enthusiasm and engagement with the websites (Herrando, Jiménez-Martínez, & Martín-De Hoyos, 2016). Social presence in the cognitive stage is the antecedent of sPassion and purchase intention in the behavioral stage is a consequence of

sPassion (Herrando, Jiménez-Martínez, & Martín-De Hoyos, 2016). The affective stage has been shown to be the basic element of the engagement-generation process (Hollebeek, 2013) and, according to Herrando, Jiménez-Martínez, and Martín-De Hoyos (2016), sPassion is the cornerstone of the s-commerce context and process.

2.4.1 Cognitive Antecedent of sPassion: Social Presence

Social presence is not a new concept and, according to Short, Williams, & Christie (1976), it is defined as "the extent to which the social commerce environment enables a customer to establish a personal, warm, intimate and sociable interaction with others" (Zhang, Lu, Gupta, & Zhao, 2014). Interaction can be in any form, such as socially rich messages (Gefen & Straub, 2004), human-like interfaces (Pavlou, Liang, & Xue, 2007), and telepresence (Algharabat, Rana, Dwivedi, Alalwan, & Qasem, 2018). Lu, Fan, & Zhou (2016) propose three dimensions of social presence: social presence of web, social presence of interaction, and social presence of others. Social presence of the web refers to the amount of friendliness that a website conveys to users (Gefen & Straub, 2004). Social presence of interaction is another key dimension of social presence (Caspi & Blau, 2008) and refers to the possibility that sellers can interact with buyers (Lu, Fan, & Zhou, 2016). However, people are more ready to believe information disclosed by their close friends (Cialdini, 2001). If the existing customers post positive information on the social commerce platform, other users will be more accepting of the positive message (Chen, Wang, & Xie, 2011) and more people will ultimately engage on the platform.

For social e-commerce platforms and mobile social commerce (Kucukcay & Benyoucef, 2014), information has various formats including text, pictures, audios, videos, or any digital format that can be distributed through the Internet (Chen, Lu, & Wang, 2017). Content sharing has evolved from the traditional text-based content to audio-, video-, and multimedia-based content

(Wang & Zhang, 2012). In online education industries, researchers have shown that video feedback has a larger impact on social presence due to the richness of the medium (Thomas, West, & Borup, 2017). An instructor smiling in a video has a larger impact on social presence than an emoticon expression in text feedback, and students generally perceive the video as being a more emotional delivery medium (Borup, West, & Graham, 2012, 2014; Henderson & Phillips, 2015). As a community provider, RED offers an online environment where users can get together with others with similar interests to share personal opinions, experiences, and knowledge in the form of pictures and videos, as well as conduct commercial transactions. These multimedia elements delivered by users are entertaining to potential buyers and can provoke excitement and inspiration (Chowdhury, Olsen, & Pracejus, 2008).

This cognitive stage has been defined as "absorption": this dimension of consumer engagement refers to the information and experience consumers get through their participation in online activities such as posting and sharing (Brodie, Ilic, Juric, & Hollebeek, 2013). Herrando, Jiménez-Martínez, & Martín-De Hoyos (2016) argue social presence is one of the cognitive antecedents of passion in a social commerce context.

2.4.2 Passion and sPassion

Passion is a well-studied concept and is usually associated with love and romantic relationships. According to Sternberg's Triangular Theory of Love (Sternberg, 1997), intimacy, passion, and decision/commitment are the three components of love; they are different but related. In the marketing literature, passion is defined as "a strong engagement in the passionate activity" (Lavigne, Forest, & Crevier-Braud, 2012). Passion is also an important factor when explaining consumers' feelings towards brands. Fournier (1998) proposed that passion is "the core of all strong brand relationships" and defined this passion as "a primarily affective, extremely positive

attitude toward a specific brand that leads to emotional attachment and influences relevant behavioral factors" (Bauer, Heinrich, & Martin, 2007). Besides brand passion, there are many factors that affect consumers' purchase intention in a social commerce context, like the design of a website, the degree of purchase convenience, and the level of customer service (Herrando, Jiménez-Martínez, & Martín-De Hoyos, 2016). Present research on passion in the e-commerce context focuses on the effects of passion on WOM, and research in other fields is scarce. Customers' passion also influences others' behaviors, like purchase intention, customer engagement, and brand loyalty.

In an online context, passion has been interpreted as being similar to engagement (Smith & Gallicano, 2015). However, Herrando, Jiménez-Martínez, & Martín-De Hoyos (2016) argue that engagement and passion are two different concepts since engagement refers to an entire process that has passion as its core. In the social commerce context, users are encouraged to post and share their experiences, text, and comments with each other and to socialize on the platform. The participation in the virtual community is a way to spread passion. Therefore, greater importance has been attached to passion in social commerce contexts where relationships can be established. Moreover, according to Brodie, Ilic, Juric, & Hollebeek (2013) and Herrando, Jiménez-Martínez, & Martín-De Hoyos (2016), sPassion is the core stage of the engagement-generation process which integrates cognitive, affective, and behavioral stages.

2.4.3 Consequence: Purchase Intention in Social Commerce

The behavioral stage of the engagement-generation process refers to the changes in consumer behavior that are the result of the two prior stages (Brodie, Ilic, Juric, & Hollebeek, 2013). For the social commerce environment, both social and commercial activities are involved. Customer engagement behavior in the s-commerce environment contains both transactional and

non-transactional behaviours (Busalim, Che Hussin & Iahad, 2019). According to the interview respondents, emotional engagement may generate increased levels of behavioral engagement, such as recommending products to others (Brodie, Ilic, Juric & Hollebeek, 2013). Similarly, Groeger, Moroko, & Hollebeek (2016) argue that when users engage with a familiar website, they will make an effort to refer and recommend it to others. Hence, in the social e-commerce context, engagement plays an important role in promoting a website through interactions between users which refers to non-transaction behavior of the engagement process. However, this study focuses on the customer engagement as a behavioral aspect and narrows the behavioral aspect to purchase intention.

When consumers make purchase decisions, their purchase intention is the premise of purchase behavior. Purchase intention also plays an important role for enterprise marketing strategies (Yin, Wang, Xia, & Gu, 2019). According to the theory of reasoned action, an individual's behavior is largely dependent on their intention, and intention has been regarded as a function of consumers' attitude towards the behavior (Yusuf, Che Hussin, & Busalim, 2018). The theory of reasoned action has been widely cited by previous researchers when studying purchase intention (Prendergast, Ko, & Siu Yin, 2010). Ajzen & Fishbein's (1975) original argument is that the consumers' attitudes towards behavior is depended on their prominent beliefs about that behavior and, by extension, their attitudes and intentions could be changed by influencing their original beliefs.

2.5 Online Shopping Convenience

Shopping has become easier since the emergence of e-commerce. When consumers are shopping online, the only thing they need is an electronic device and an Internet connection. On the other hand, people are seeking to allocate less time to shopping and are increasingly valuing convenience, which has resulted in an increased willingness to shop online (Kumar & Kashyap,

2018). Based on this trend, online shopping convenience has become a principal motivator for customers to adopt online shopping (Jiang, Yang, & Minjoon, 2013).

The concept of convenience in marketing research field can be traced to the early 20th century. Copeland (1923) defines convenience goods as products that consumers purchase frequently and those can be easily accessed. Two essential elements of consumer convenience addressed in most literature on the traditional retailing environment are timesaving and effort-saving (Seiders, Voss, Godfrey, & Grewal, 2000; 2005; 2007). As a context-based concept, consumers' perceptions of convenience depend on settings, and online shopping convenience is completely different from traditional offline shopping convenience. Research on online service quality has pointed out several unique features of online shopping, like ease of access, interactivity, information richness, and security (Jun, Yang, & Kim, 2004; Parasuraman, Zeithaml, & Malhotra, 2005; Yang, Cai, Zhou, & Zhou, 2005).

Service convenience was first described by Berry, Seiders, & Grewal (2002); Seiders, Voss, Godfrey, & Grewal (2007) further developed this concept into a five-element instrument. However, the SERVCON scale was developed under the traditional offline context which is not entirely suitable for an online purchase environment, and Bednarz & Ponder (2010) filled this gap by developing a construct which is suitable for offline and online environments. Finally, Jiang, Yang, & Minjoon (2013) suggest five dimensions of online purchase convenience: access, search, evaluation, transaction, and possession/post-purchase convenience. Access convenience refers to the convenience of consumers to shop at any time and place. Search convenience refers to the convenience of a customer locating their desired products and the ease of accessing information online about their products without physically visiting a store. Evaluation convenience concerns the availability of detailed, easy-to-understand product descriptions by employing various website

features, such as text, graphics, and video. Transaction convenience refers to the online check-out process without queuing in line. Possession/post-purchase convenience refers to consumers seeking to avoid travel costs and physical exertion by purchasing products online.

A summary table for the literature review is shown in Table 2.1. These studies cover different areas of research, from social commerce and customer engagement in social e-commerce context to online shopping convenience. The literature review covered systematic literature review as well as different surveys and experiments. These studies are the theoretical foundation of this research.

Table 2. 1 Summary of Literature Review

Publication Detail	Study Design	Subjects	Results
Herrando, Jiménez-Martínez, & Martín-De Hoyos (2016)	Survey	473 users of social commerce websites in Spain	The cognitive experience and emotional feelings derived from the engagement-generation process improve user participation. At the core of the process, sPassion positively affects the spread of sWOM.
Busalim, Che Hussin, & Iahad (2019)	Systematic literature review	Studies on customer engagement extend from 2010 to 2017	Social theories and factors play a significant role in customer engagement and boost user participation.
Lu, Fan, & Zhou (2016)	Free simulation experiment	546 MBA and senior undergraduate students in business schools from two universities of China	This paper confirms the positive impact of social aspect on online purchase behaviors, which provides theoretical evidence for the fusion of social and commercial activities.
Li (2019)	Survey	420 customers from Facebook fan page of Kidshome	Social commerce constructs exert positive and significant effects on social interactions in terms of cognitive states (social presence and emotional support) and affective states (familiarity and closeness).
Gunawan, Saleha, & Muchardie (2018)	Associative descriptive research based on a survey	200 respondents in Jakarta	Brand preference, shopping convenience, and consumer adoption level significantly influence purchase intention.
Sethi & Sethi (2016)	Survey	580 respondents who had experience of online shopping	The convenience of shopping online and the attitude towards website safety impact online purchase intention.

3 Study Objectives

The study's objective is to determine if format affects social presence and if exposure to different content alters purchase intent. This study also explores how social commerce companies

can improve purchasing convenience with the goal of engaging customers and increasing purchases.

This study examines the role of social presence and online shopping convenience and how they affect the participation of users by measuring their purchase intention. The model constructed in this study is based on the three-stage engagement-generation process: cognitive, affective, and behavioral (Groeger, Moroko, & Hollebeek, 2016). It is applied to the new social e-commerce app RED, based in China. The goal of the model is to show how to combine social presence and online shopping convenience to help engage consumers, to determine if the mediation effect of sPassion is significant and what is the interaction effect of social presence and online purchase convenience on online purchase intention; and to recommend strategies that may be beneficial for the success of social e-commerce websites as well as brands.

Previous literature on passion in the e-commerce context focuses on the effects of passion on word of mouth (WOM) engagement. However, the last stage of the customer engagement process integrates not only WOM but also customer participation (Busalim, Che Hussin, & Iahad, 2019) which is the research gap this study fills. This study also contributes to the literature as follows: the study centers on the interactive effects of social presence and online purchase convenience and methods for engaging consumers on social commerce platforms—an area that has not previously been studied—and uses the novel social commerce app RED as the study subject to open a new line of research.

4 Construct Definition

This study proposes that social presence positively impacts online purchase intention based on the process of engagement-generation. Since the online commercial environment lacks real

face-to-face interaction among consumers, social presence becomes more important (Cyr, Hassanein, Head, & Ivanov, 2007). The concept represents a communication medium to encourage interaction among consumers. In the context of the RED app, social presence in this study refers to the friendliness that RED conveys to users (Gefen & Straub, 2004) and the warmth with which users interact with each other.

Hajli & Sims (2015) argue in their social commerce research that socialization in virtual communities is characterized by information exchanges and emotional support. Users that socialize and post online feel important as other user interact and reflect on their post. Regular users on RED can even become cyber celebrities through another users' comments and reposts. When users are satisfied and pleased with the social commerce website, their positive experience and passion will be passed on to other users as they use the website. This study defines sPassion in this study as the feelings towards the RED and its online virtual communities, rather than a specific brand or company.

Social commerce focuses on providing business for all social members in the community, thus more importance has been attached to consumers' purchase intention and its sustainable development (Li, Liang, & Li, 2018). This study defines online purchase intention as a customer's intention to engage in online shopping through social networking sites—that is, customer's intention to purchase products or attitudes towards purchasing products through RED (Lu, Fan, & Zhou, 2016).

Jiang, Yang, & Minjoon (2013) suggest five dimensions of online purchase convenience: access, search, evaluation, transaction, and possession/post-purchase convenience. RED is different from both social networking platforms and traditional social commerce platforms as it combines social networking and e-commerce, which allows users to purchase directly from the

platform. Therefore, online purchase convenience in this study specifically refers to transaction convenience.

There is a research gap here since previous literature available related to passion in the e-commerce context focuses on the effects of passion on WOM. However, the last stage of the customer engagement process integrates not only WOM but also customer participation, such as purchase intention (Busalim, Che Hussin, & Iahad, 2019). This study also includes sPassion, a new concept in social commerce, and research on different content formats in a social commerce context. This study is also valuable as there is no literature to date that focuses on the interaction between social presence, online purchase convenience, and online purchase intention.

While all the constructs come from previous research, the context in this study differs as it focuses on the social commerce app RED. The constructs used in this study are shown in Table 4.1.

Table 4. 1 Constructs Definition

Construct	Definition
Social Presence	Friendliness that RED conveys to users (Gefen & Straub, 2004) and the warmth when users interact with each other.
sPassion	Users' feelings towards RED and its online virtual communities
Online Purchase Intention	Customer's intention to purchase products or attitudes towards purchasing products through RED
Online Purchase Convenience	Transaction convenience on the RED

5 Hypothesis Development

Studies show there are three dimensions in the engagement-generation process: cognitive, affective, and behavioral (Groeger, Moroko, & Hollebeek, 2016). The research model used in this

study proposes that sPassion acts as a bridge in the engagement-generation process, where social presence is a cognitive antecedent and online purchase convenience is the outcome. The study also proposes that content format and online purchase convenience affect online purchase intention. Moreover, this study proposed that sPassion is a cornerstone of customer engagement and mediates the interactive effect of social presence and online purchase convenience on online purchase intention.

The conceptual framework is illustrated in Figure 5.1.

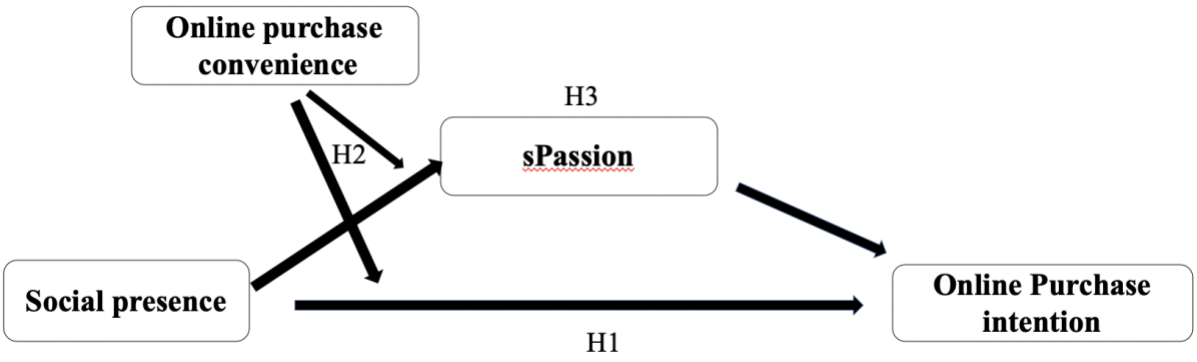

Figure 5. 1 Conceptual Framework

5.1 Social Presence and Online Purchase Intention

Information can be posted on social commerce platforms in the form of text, picture, audio, and video (Chen, Su, & Widjaja, 2016) and has evolved from the traditional text-based content to audio-, video-, and multimedia-based content (Wang & Zhang, 2012). In online education industries, researchers have shown that video feedback has a larger impact on social presence due to the richness of the medium (Thomas, West & Borup, 2017). When an instructor smiles in a video it a larger impact on social presence than an emoticon expression in text feedback, and students generally perceive the video as being a more emotional delivery medium (Borup, West &

Graham, 2012, 2014; Henderson & Phillips, 2015). Therefore, this study proposes that the video format can convey more social presence than text format in the social commerce context.

The perception of interaction with another person in virtual community has been defined as social presence (Gefen & Straub, 2000) and, according to Ou, Pavlou, & Davison (2014), social presence is "a buyer's perception of intimacy with a seller in terms of human contact, human warmth and sensitivity." Websites with increased social presence can provide more information to customers which enhances their perceived transparency (Lu, Fan, & Zhou, 2016). Greater perceived transparency in the online purchase environment is linked to a greater sense of security when making purchase decisions (Lee & Park, 2014). Based on the arguments of Cui, Wang, & Xu, (2010), social presence can also influence users' attitude towards the website through their involvement, committed behavior, and participation. Recommendations and comments posted on social e-commerce websites encourage consumers' transactional behavior and increase social presence (Kumar & Benbasat, 2006). Therefore, an improvement of perceived social presence encourages positive attitudes towards online shopping (Hassanein & Head, 2007).

RED adds a sociability function when compared to traditional e-commerce platforms, but it still lacks human contact. When RED users post a video or introduce a product, the form is similar to live streaming shopping, where other users can see the streamer's movements and hear their voice. Other users are able to see the person with whom they are communicating is a real person, which creates a feeling of social presence (Li, 2019). Social presence is one of variables that contributes to customer engagement online and, when customers have positive experiences using the platform, their purchase intention will be enhanced (Smith & Gallicano, 2015). If the reviews from other customers of social commerce are positive, a positive signal will be delivered

to other user (Chen, Wang, & Xie, 2011) that will ultimately increase the likelihood of customers engaging in social commerce. Therefore, this study proposes:

H1a Video conveys more social presence than text.

H1b Social presence has a positive effect on online purchase intention. A higher social presence results in a higher purchase intention.

5.2 Online Purchase Convenience

In the online context, social presence, characterized as the feeling or sense of warmth and sociability towards a website, has beneficial consequences (Gefen & Straub, 2004). Dash & Saji (2008) also proposed that the perceived risk in the online shopping process can be minimized by social presence embedded in the online shopping process. In the existing literature, social presence is a key precursor influencing users' behavior (Weisberg, Te'eni & Arman, 2011) and an antecedent enhancing customers' perception of enjoyment in the e-commerce contexts (Hassanein & Head, 2007).

The most salient element of online shopping is convenience (Sethi & Sethi, 2016) since consumers can place orders at any time and in any place and they have the facility of getting information about the products. Gunawan, Saleha, & Muchardie (2018)'s preliminary research shows that shopping convenience accounted for 43% of all the factors that influence purchase intention, which is in line with Nielsen's report (2015). The report points out that 46% of respondents consider shopping convenience the main motivator for conducting grocery shopping online. Many alternative online shopping sites are available so that consumers can choose the most appropriate format to meet their needs for convenience, choice, and value. Gunawan, Saleha, & Muchardie (2018) also suggest shopping convenience has a positive impact on purchase intention, which is consistent with Jiang, Yang, & Jun (2013). The study by Rajamma, Paswan, & Hossain

(2009) indicates that purchase inconvenience is the most important factor that left consumers unsatisfied and could result in them abandoning products in their shopping carts. Furthermore, when online shopping becomes less convenient due to a complicated registration process, a technical problem, or a lengthy form to fill, consumers' transaction behavior will be inhibited (Özkan, Bindusara & Hackney, 2010). Based on these studies, this study argues that the degree of online purchase convenience significantly influences the relationship between social presence and consumers' purchase intention. These empirical findings underlie the following hypotheses:

H2a The presence of a "click here to buy" button increase online purchase convenience.

H2b The effect of social presence on purchase intention is moderated by online purchase convenience.

H2c The effect of social presence and purchase convenience have a positive effect on purchase intention.

5.3 sPassion

According to Darke, Brady, Benedicktus & Wilson (2016), increased perceived social presence will shorten the psychological distance between customers and users who post notes or videos, thus enhancing the sense of intimacy (Gao, Liu, Liu, & Li, 2018), establishing closer relationships, and increasing customers' perceived pleasure and satisfaction of the online shopping experience (Choi, 2016). sPassion has been defined as a user's positive feelings towards social commerce websites through interaction and socialization, leading to an increase in user enthusiasm and engagement with the websites (Herrando, Jiménez-Martínez, & Martín-De Hoyos, 2016). Purchase intention has been defined by prior researchers as consumers' willingness to buy and repurchase and refers to the degree of a customer's perceptual conviction when they make a purchase decision (Balakrishnan, Dahnil, & Yi, 2014). Purchase intention in this study specifically

refers to a customer's intention to engage in online shopping through social networking sites (Lu, Fan & Zhou, 2016). There are two dimensions of passion: harmonious passion and obsessive passion (Vallerand et al., 2003). Both have a positive impact on online shopping intention, and the more passionate consumers are, the more time and energy they will devote to online shopping (Wang, & Yang, 2008).

In numerous prior studies, researchers focus on the relationship between brand passion and purchase intention. Based on brand equity theory, there is a positive relationship between a consumer's passion for a brand and their willingness to pay more for that brand, and there is a higher likelihood that he will recommend this brand to others (Thomson, MacInnis, & Whan Park, 2005). According to Albert, Merunka, & Valette-Florence (2013), brand passion has a positive impact on brand commitment. Therefore, consumers will pay higher prices to possess a product and make recommendations about that product to others. Consistent with the argument that engagement has a positive impact on consumers' participation, passion has been regarded as the most important aspect of brand love which affects loyalty (Herrando, Jiménez-Martínez & Martín-De Hoyos, 2016).

In this respect, the following hypothesis can be formulated:

H3: The interactive effect of social presence and online purchase convenience on online purchase intention is mediated by sPassion.

6 Research Methodology

6.1 Data Collection

For the pre-test, 250 participants were involved, and the data was collected in China via an online questionnaire through Weidiaocha, an online survey company. All the participants are

female as more than 90% RED users are female. In the pre study, 50% were users of RED and 50% were non-users of RED. At the beginning of the study, participants read a short paragraph on the instructions for the study, the explanation of the video they would watch, and the text they would read. After watching the video or reading the text, participants were asked to complete the questionnaire on social presence, sPassion, online purchase convenience, online purchase intention, and demographic information.

The data used for the main study was collected through the same platform (Weidiaocha). All participants were randomly assigned to these four groups. The sample consists of 1530 female participants, of which there are 50% users of RED and 50% non-users of RED. The questionnaire used in the main study is the same as the pre-test.

6.2 Study Design

A randomized experiment with between-subjects design has been used in the current study. Since there are two levels of social presence and two levels of online purchase convenience, the current study is a 2*2 design. The design featured a video and a paragraph of text which conveys the same content, an introduction to a skin care product. Video and text with picture represent two main formats of content on RED. In order to compare them in equivalent conditions, there were two formats of contents: video (high social presence), which was delivered by a Korean actress and text with picture (low social presence) which was a written copy of the video. Since “one stop shopping” is a salient characteristic of RED, a “click here to buy” button was designed to represent the online purchase convenience of RED. Half of participants got the questionnaire with the “click here to buy” button and the other half of participants got the questionnaire without the “click here to buy” button. For the group without the “click here to buy” button, the group has been told this product can be found on other platforms or there is a purchase link, but they need to go to another

URL to buy. Participants are told to describe their next step with at least 30 characters (less convenient).

There are four treatment conditions for two types of content format and two levels of purchase convenience involved which shows in the Table 6.1.

Table 6. 1 Experimental Design

	Video	Text
Button	Group 1	Group 3
Without Button	Group 2	Group 4

To avoid the effect of brand familiarity, this study chose the brand based on its popularity on Weibo, one of the biggest social media platforms in China. The platform has become an important place for brands to do social media marketing. The brand used in this study is Lemon & Beaker. The brand comes from New Zealand and has 30k followers on Weibo and is not very popular when compared to popular brands such as Dior and Estée Lauder, which both have more than 3 million followers. To avoid the celebrity effect, this study chose a video which is delivered by a Korean actress. The Korean actress has 46.6k followers on RED and was ranked 603 on the celebrity list. Top-ranking celebrities normally have more than 10000k followers. Therefore, brand familiarity and the influence of celebrity would be unlikely to affect the reactions of participants when they watched video or read the text. In order to control whether participants were highly engaged because of the study or they originally engaged in this series of products, participants were asked to answer several questions related to the product involvement scale at the beginning of the questionnaire. In addition, to avoid any effects of that might come from taking the questionnaire on a different device, participants were only allowed to use a PC/laptop or tablet

devices for the experiment. Moreover, all items of scales in the questionnaire are translated from English to Chinese by a professional translator located in China to avoid any misunderstandings.

6.3 Measurement

This study reviewed the literature regarding the variables included in the model in order to ensure the reliability and validity of the constructs and adapted them to the s-commerce context. The survey consisted of four parts: social presence, sPassion, online purchase convenience, and online purchase intention. All items were measured on a 7-point Likert-type scale, with the lowest score being 1, strongly disagree, and the highest score being 7, strongly agree.

Measurement scales were all adopted from prior research and are shown in Table 6.2. In order to control whether participants are highly engaged because of the study or were originally engaged in this series products, product involvement was controlled as a covariate.

Table 6.2 Constructs and Items Used in the Questionnaire

Constructs	Items	References
Product involvement	For me, skin care and skin care products mean a lot. For me, skin care and skin care products are interesting. For me, skin care and skin care products are valuable. For me, skin care and skin care products are appealing.	Rokonuzzaman, Harun, Al-Emran, & Prybutok (2020)
Social presence	There is a sense of human contact on this social commerce website. There is a sense of sociability on this social commerce website. There is a sense of human warmth on this social commerce website.	Gefen & Straub (2004)
sPassion	I am motivated to participate on this social commerce website because I am passionate about it. I participate on this social commerce website because I care about it. My passion for this social commerce website's products makes me want to participate in its community. I like participating on this social commerce website because I can use my experience to help other people. I really like helping other users with their questions. I feel good when I can help answer other users' questions.	Baldus, Voorhees, & Calantone (2015)
Online purchase intention	I would probably think about purchasing this product. I would probably think about shopping at this website. If I need a product in the future, I would like to buy it on this website. I would encourage others to shop online at this website.	Li, Liang, & Li (2018) and Yin, Wang, Xia, & Gu (2019)
Online purchase convenience	The website is user-friendly for making purchases. The website is easy to understand and navigate. I am able to complete my purchases without difficulty.	Clemes, Gan, & Zhang (2014)

7 Pre-test

Firstly, SPSS 26 was used to test each construct's reliability and all the scales' Cronbach's α were higher than 0.8. The measures have sufficient reliability and are ready for further regression tests. Then, the t-test was used to analyze the data. From the results, participants who watched the video (M = 5.20, SD = 1.18) reported higher level of social presence than participants who read the text (M = 4.71, SD = 1.24), t (199) = 2.881, p = .004. When there is no button, participants feel more convenient (M = 5.78, SD = 1.07) than when there is a button (M = 5.49, SD = 1.21), t (199) = 1.85, p = .033.

A t-test was also conducted between the user group and the non-user group. The results show that users (M = 5.05, SD = 1.19) have higher level of social presence than the non-users (M = 4.47, SD = 1.33), t (199) = 2.78, p = .006. The users find RED more convenient (M = 5.70, SD = 1.06) than the non-users (M = 5.18, SD = 1.67), t (199) = 2.49, p = .013.

A 3-way ANCOVA was completed for the preliminary test of the model. The interaction effect of the three variables (videotext * button * user group) is not significant: F (1,1521) = 3.049, p = .81>.05. Since the interaction of the three variables is not significant, the interaction of videotext * user group and the interaction of button*user group were examined. These results are also not significant: significance level of videotext * user group is F (1,1521) = .424, p = .515>.05 and significance level of button * user group is (1,1521) = 1.536, p = .215>.05.

This study then looked into the main effect of user group variable on purchase intention. The result is not significant: F (1,1521) = .203, p = .653>.05. Therefore, this variable was not included in the following analyses.

8 Results

8.1 Sample Description

A total of 1530 valid questionnaires were collected in the current study from the Weidiaocha platform. All of respondents were Chinese and female since more than 90% RED users are female. This study excludes male users. The specific demographics of research participants is shown in the Table 8.1: nearly 90% are among the 18-34 age group, more than 90% have a degree below master, and more than 50% have a bachelor's degree. More than 90% of participants earn less than $30,000 annually and more than 80% are located in urban places.

Table 8. 1 Demographics of Research Participants

		Frequency	*Percent*
Age	Under 18	96	6.3
	18-24	727	47.5
	25-34	625	40.8
	Above 35	82	5.4
	Total	1530	100
Education	High school	313	20.5
	College	338	22.1
	Bachelor	786	51.4
	Master and above	93	6.1
	Total	1530	100
Annual Income	Under 10000 CAD	754	49.3
	10000 CAD-30000 CAD	630	41.2
	30000 CAD-50000 CAD	120	7.8
	50000 CAD-70000 CAD	16	1.0
	Above 70000 CAD	10	.7
	Total	1530	100

8.2 Descriptive Statistics

Table 8.2 show the descriptive statistics from the questionnaire for the whole sample. All of the items were measured on a 7-point Likert-type scale, with the lowest score being 1, strongly

disagree, and the highest score being 7, strongly agree. The answers in the scale are examined with the means of all the items for each scale. The respondents of this sample feel that skin care and skin care products are important. They also feel a sense of warmth from RED itself; become passionate for the app; and enjoy participating with others in the form of answering the questions of others on RED. They believe the app is easy to understand and navigate and would consider shopping on the RED app.

Table 8. 2 Descriptive Statistics for Sample

	Questionnaire Item	*Mean*	*Std. Deviation*
Product Involvement	For me, skin care and skin care products mean a lot.	5.86	1.18
	For me, skin care and skin care products are interesting.	5.36	1.29
	For me, skin care and skin care products are valuable.	5.65	1.20
	For me, skin care and skin care products are appealing.	5.65	1.19
Social Presence	There is a sense of human contact on this social commerce website.	4.77	1.38
	There is a sense of sociability on this social commerce website.	4.79	1.33
	There is a sense of human warmth on this social commerce website.	4.83	1.30
Purchase Convenience	The website is user-friendly for making purchases.	5.46	1.10
	The website is easy to understand and navigate.	5.62	1.05
	I am able to complete my purchases without difficulty.	5.30	1.32
Purchase Intention	I would probably think about purchasing this product.	4.99	1.30
	I would probably think about shopping at this website.	5.30	1.14
	If I need a product in the future, I would like to buy it on this website.	5.26	1.19
	I would encourage others to shop online at this website.	4.75	1.25
sPassion	I am motivated to participate on this social commerce website because I am passionate about it.	4.63	1.32
	I participate on this social commerce website because I care about it.	4.46	1.37
	My passion for this social commerce website's products makes me want to participate in its community.	4.74	1.32
	I like participating on this social commerce website because I can use my experience to help other people.	5.23	1.24
	I really like helping other users with their questions.	5.55	1.12
	I feel good when I can help answer other users' questions.	5.72	1.06

8.3 Data Reduction Results

This study first used SPSS 26 to conduct reliability tests for each construct. Reliabilities for all constructs are shown in the measurement section. Cronbach's α was chosen as the standard. Generally, when the score is higher than 0.7, the measure is considered to be internally consistent. As shown in the Table 8.3, all the scales' Cronbach's α were higher than 0.8. The measures have sufficient reliability and are ready for further regression tests.

Table 8. 3 Psychometric Properties of the Scales

Measure	Cronbach's α	Average Variance Extracted	Construct Reliability
Product Involvement	.886	.663	.887
Social Presence	.829	.622	.831
Online Purchase Convenience	.805	.588	.809
Online Purchase Intention	.865	.623	.868
sPassion	0.877	.567	.883

Based on the above scores, a CFA was conducted for further model validity to see the suitability of the proposed model fit for the data in the current study. Table 8.4 shows the result of KMO and Bartlett's Test result. KMO value is .947 (Sig. = .000), which means that the data is adequate for factor analysis. The Bartlett's test was significant (p =.000), which also proved that the questionnaire has good structural validity. The results are significant and only two factor loadings are less than 0.7. All AVE are above 0.5 and all CR are above 0.7, so convergent validity is confirmed. Compared to the correlation estimates, each variable's AVE exceeds the squared correlation estimates between the constructs, which shows good discriminant validity (Table 8.5). Based on these results, the measures have sufficient validity for further analysis.

A principal component analysis was conducted, and the scree plot is shown in the Figure 8.1. There were 5 factors extracted which is consistent with this study.

Table 8. 4 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.947
Bartlett's Test of Sphericity	Approx. Chi-Square	4636.873
	df	153
	Sig.	.000

Table 8. 5 Discriminant validity: Pearson coefficients and AVEs

	Product Involvement	Social Presence	Purchase Convenience	Purchase Intention	sPassion
Product Involvement	0.814				
Social Presence	0.349	0.788			
Purchase Convenience	0.408	0.554	0.767		
Purchase Intention	0.329	0.613	0.636	0.789	
sPassion	0.388	0.637	0.557	0.697	0.753

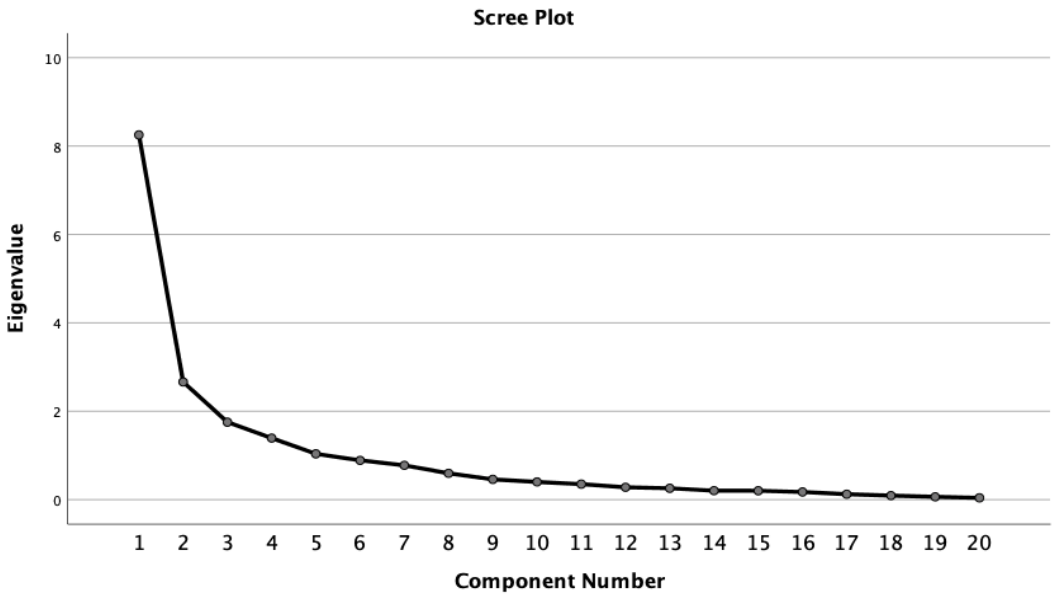

Figure 8. 1 Scree Plot

8.4 Social Presence

One-way ANCOVA was used for the manipulation check in this study. Product involvement was treated as the covariate. To test if social presence was significantly different between the video group and the text group, social presence was treated as a dependent variable. The result in the Table 8.6 is significant ($p < .001$), which means that social presence is significantly different between the video group and the text group. The mean value of social presence for the video group is 4.90 and the mean value of social presence for the text group is 4.69, meaning that videos convey a higher level of social presence than text. Therefore, H1a is supported and this study used the "format of content" (video vs text) as independent variable to represent social presence in the later discussion.

Table 8. 6 Test of Between-Subjects Effects

Dependent Variable: Social Presence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	264.124	2	132.062	114.684	.000	.131
Intercept	355.867	1	355.867	309.038	.000	.168
Product Involvement	248.013	1	248.013	215.377	.000	.124
Video vs Text	17.369	1	17.369	15.084	**.000**	.010
Error	1758.387	1527	1.152			
Total	37264.111	1530				
Corrected Total	2022.510	1529				

8.5 Purchase Convenience

To test if the result of online purchase convenience was significantly different between the button group and the non-button group, online purchase convenience was treated as the dependent variable. This study used a button or non-button as the independent variable to represent online purchase convenience in the later discussion. The button was designed to represent online purchase convenience. Pritschet, Powell & Horne (2016) found that over 1,500 papers in three journals of psychology used terms like "marginally significant" or "approaching significance" for *p*-values between 0.05 to 0.1 and up to 0.18. According to Amrhein, Korner-Nievergelt, & Roth (2017), there are researchers willing to acknowledge a statistical "trend" when *p*-value is larger than .05 and larger *p*-value need to gain reputation. Therefore, the result in the Table 8.7 shows that $p = .090$ which can be considered as moderately significant. The mean value of purchase convenience for the button group is 5.41 and the mean value of purchase convenience

for the non-button group is 5.50. The result shows that when there is no button, participants feel it is more convenient to purchase. Therefore, H2a is rejected.

Table 8. 7 Test of Between-Subjects Effects

Dependent Variable: Online Purchase Convenience

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	249.473	2	124.737	154.196	.000	.168
Intercept	557.453	1	557.453	689.107	.000	.311
Product Involvement	246.590	1	245.590	304.827	.000	.166
Button vs No Button	2.332	1	2.332	2.883	**.090**	.002
Error	1235.266	1527	.809			
Total	47069.556	1530				
Corrected Total	1484.7440	1529				

8.6 The Effect of Social Presence on Purchase Intention

The relationship between social presence and online purchase intention was tested through one-way ANCOVA since social presence here is a categorical variable and purchase intention is a continuous dependent variable. Table 8.8 shows the significant relationship between social presence and online purchase intention to be p = .358, which means the result is not significant. Therefore, H1b is rejected and different content format does not have an effect on online purchase intention.

Table 8. 8 Test of Between-Subjects Effects

Dependent Variable: Online Purchase Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	175.895	2	87.947	93.044	.000	.109
Intercept	542.529	1	542.529	573.969	.000	.273
Product Involvement	174.846	1	174.846	184.979	.000	.108
Video vs Text	.800	1	.800	.846	**.358**	.001
Error	1443.355	1527	.945			
Total	40992.375	1530				
Corrected Total	1619.249	1529				

8.7 The Interaction Effect of Social Presence and Purchase Convenience on Purchase Intention

Two-way ANCOVA is used to test the interaction effect of social presence and purchase convenience on purchase intention since there are two levels of social presence (video vs. text) and two levels of purchase convenience (button vs. no button). The interaction between social presence and online purchase convenience on purchase intention is significant (p = .006) as shown in the Table 8.9, which means the effect of social presence on online purchase intention is moderated by online purchase convenience. Therefore, H2b is supported.

Table 8. 9 Test of Between-Subjects Effects

Dependent Variable: Online Purchase Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	190.664	4	47.666	50.883	.000	.118
Intercept	540.570	1	540.570	577.053	.000	.275
Product Involvement	175.082	1	175.082	186.898	.000	.109
Video vs Text	.572	1	.572	.611	.435	.000
Button vs No Button	7.553	1	7.553	8.063	.005	.005
Video_Text * Button_Nobutton	7.034	1	7.034	7.509	**.006**	.005
Error	1428.585	1525	.937			
Total	40992.375	1530				
Corrected Total	1619.249	1529				

Moreover, since the interaction effect is significant, simple effects of content format and online purchase convenience on online purchase intention were also tested. Table 8.10 shows that video and text have different effects on purchase intention when there is a button and there is no button. When there is no button, participants who read text (M = 5.20) have a higher level of purchase intention than those who watched a video (M = 5.06, p = .012, η^2 = .004). The simple effect of content format is shown in the Figure 8.2. Table 8.11 shows that button and no button have different effects on purchase intention when the formats of content are different. When the content is delivered by written text, the no button group (M = 5.23) has a higher level of purchase intention than the button group (M = 4.98, p = .000, η^2 = .010). The simple effect of purchase convenience is shown in the Figure 8.3. Therefore, H2c is supported.

Table 8. 10 Univariate Tests

Dependent Variable: Online Purchase Intention

		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
No Button	Contrast	5.873	1	5.873	6.270	**.012**	.004
	Error	1428.585	1525	.937			
Button	Contrast	1.778	1	1.778	1.898	.169	.001
	Error	1428.585	1525	.937			

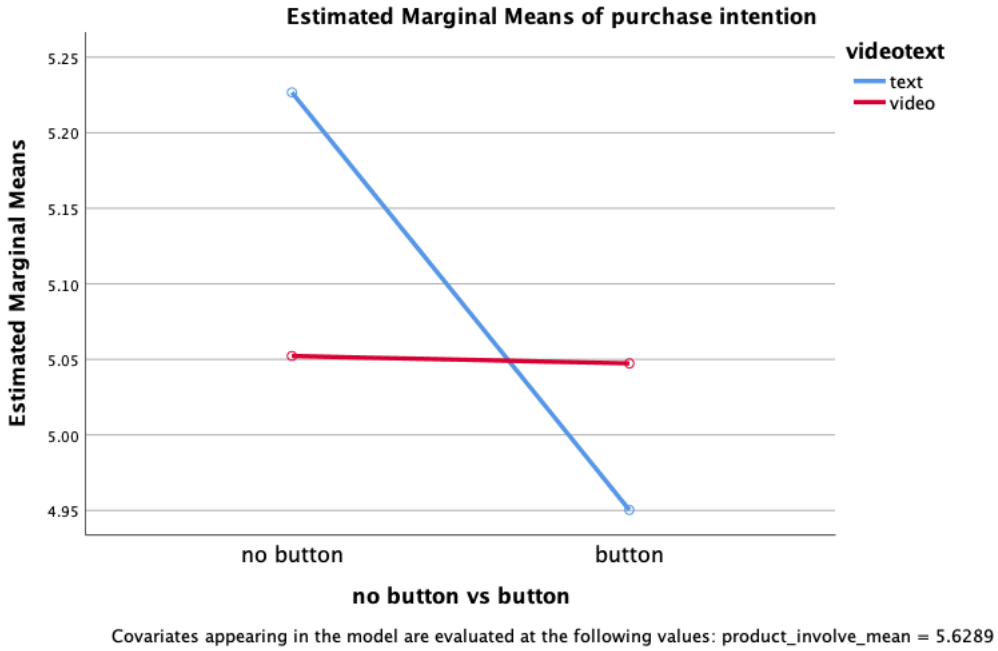

Figure 8. 2 The Conditional Effects of Content Format (Video vs. Text) on Purchase Intention

Table 8. 11 Univariate Tests

Dependent Variable: Online Purchase Intention

		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Text	Contrast	14.765	1	14.765	15.762	.000	.010
	Error	1428.585	1525	.937			
Video	Contrast	.005	1	.005	.005	.944	.000
	Error	1428.585	1525	.937			

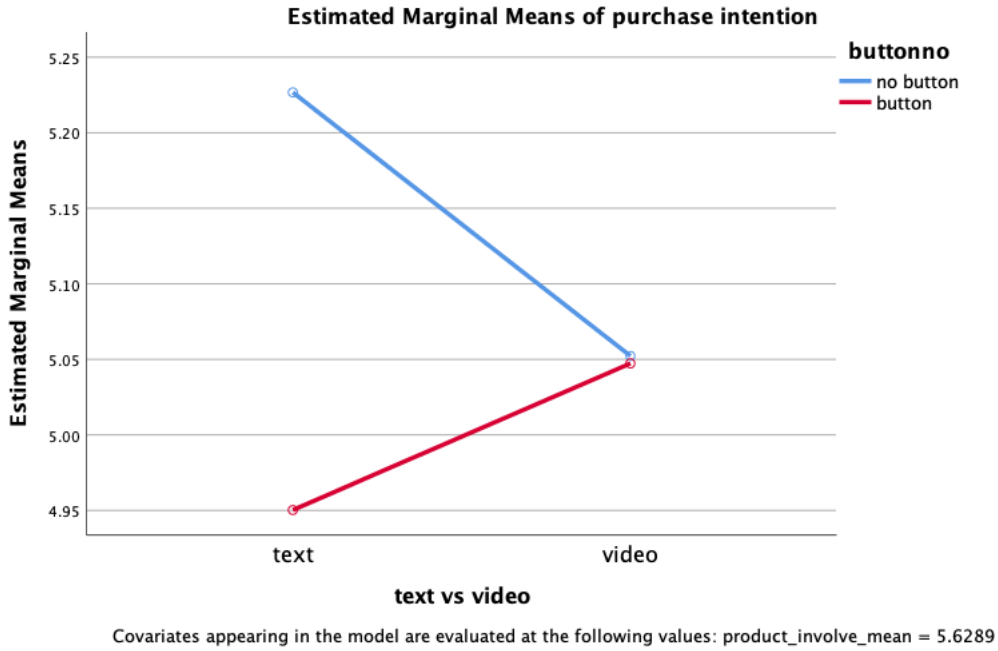

Figure 8. 3 The Conditional Effects of Purchase Convenience (Button vs. No Button) on Purchase Intention

8.8 Test of Moderated Mediation

PROCESS (Hayes, 2017; model 8) was used to test the moderated mediation. The bootstrapping technique is a computationally intensive approach involving repeated data set sampling and indirect effect estimation in each resampled data set. Bootstrapping offers the most

efficient and fair way to achieve trust limits for particular indirect effects in most circumstances (Kim, Cho, Kang, Chang, Lee, & Yeom, 2015).

BootLLCI refers to the lower limit of the bootstrap 95% CI and BootULCI refers to the upper limit of the bootstrap 95% CI. The confidence interval gives a range of plausible values for the estimate. If the 95% confidence interval does not contain zero at the selected level of confidence the result is statistically significant ($p < .05$). The result is presented in the Table 8.12 and the result shows that the 95% confidence interval contains 0 (-.052 ~ .204). The mediation effect is not significant. Therefore, H3 is rejected. This may owe to the wording of the sPassion scale and will be discussed in the discussion section.

Table 8. 12 Test of Moderated Mediation

Indext of Moderated Mediation				
	Index	BootSE	BootLLCI	BootUlCI
Purchase Convenience	.076	.065	-.052	.204

The summary of hypotheses test can be found in the Table 8.13 and the final model can be found in the Figure 8.5.

Table 8. 13 Summary of Results

	Hypotheses	Result
H1a	Video conveys more social presence than text.	Supported
H1b	Social presence has a positive effect on online purchase intention. A higher social presence results in a higher purchase intention.	Rejected
H2a	The presence of a "click here to buy" button increase online purchase convenience.	Rejected
H2b	The effect of social presence on purchase intention is moderated by online purchase convenience.	Supported
H2c	The effect of social presence and purchase convenience have a positive effect on purchase intention.	Supported
H3	The interactive effect of social presence and online purchase convenience on online purchase intention is mediated by sPassion.	Rejected

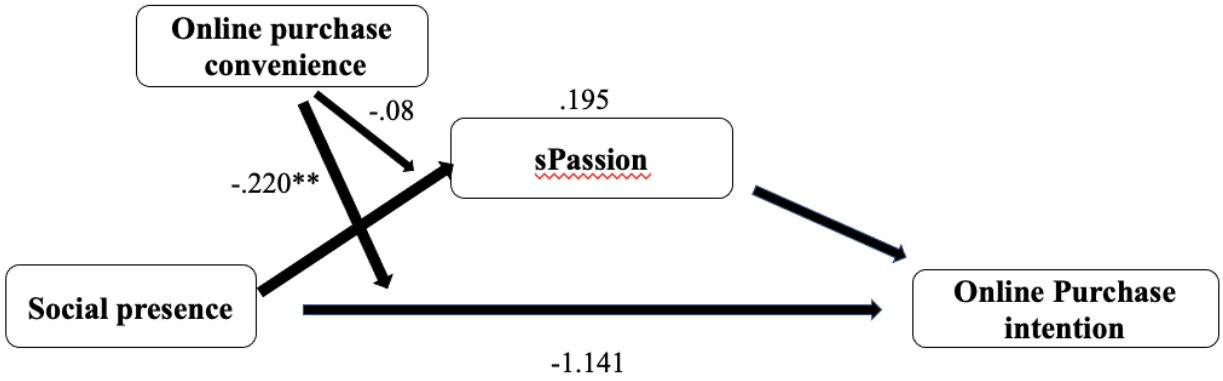

Figure 8. 4 Final Model

9 Discussion

This section summarises the results and examines the insights drawn from the research and is based on the results and data analysis discussed above. The study's objective was to determine whether the formats of content convey different levels of social presence and whether consumers

have different levels of purchase intention when they are exposed to different contents; a third goal was to provide insight into methods for improving purchase convenience that will engage customers and increase purchases.

The results of this study allow us to make the following observations. Firstly, when RED users are exposed to different formats of content, they have different levels of social presence. Those who watched videos had higher levels of social presence than those who read text. Based on the study of Hassan, Iqbal & Khanum (2018), if the social presence of the online products available is attractive and effective, customers are more likely to buy on social commerce platforms. In addition, the experience of customers positively and significantly influences the intention of customers to buy on a social commerce platform. However, in this study, a higher social presence does not result in a higher purchase intention. RED users that are exposed to different formats of content will not have significantly different on their purchase intentions. The different results may be caused by different contexts and different experimental designs. The study conducted by Hassan, Iqbal, & Khanum (2018) shows social presence positively affect purchase intention, and the study was based on social commerce in Pakistani context, and it used purposive sampling techniques to yield data from the respondents. Future studies should focus on the relationship between social presence and purchase intention on other social commerce platforms to see if the result is in line with this study.

This study's experimental design was based on different content formats and it was assumed that the amount of time the participants spent watching the video and reading the text would not affect the results. Therefore, participants who watched the video would move to the next part of the questionnaire after the ending of the video which is 123 seconds in total. Participants who read the text were provided 60 seconds to complete reading since there are 426 words in the

text and the average speed of reading for Chinese people is 300-500 word per minute (Zhu et al., 2019). According to Dai et al. (2014), time risk refers to the time that consumers take to make a purchase, and it is a time-consuming process for consumers to search, browse and purchase. Based on the study of Ariffin, Mohan & Goh (2018), time risk has a strong negative influenced on online shopping intentions. Future research should consider time as a variable to study social e-commerce platforms.

The "click here to buy" button was designed to represent online purchase convenience of RED. The study proposed that when there was a button, consumers will feel more convenient than when there was no button. However, the result shows the opposite; when there is no button, consumers feel more convenience. This may be because the design of the button does not simulate the real purchasing scenario very well: when participants click on the "click here to buy" button, it will not bring them to the real purchasing page but instead merely records if they clicked or not. For the no button group, this study gave participants instructions on where they could buy the product from a third-party platform and asked them to describe their operation. It is possible that this difference led to the unexpected result.

Moreover, the interaction effect of social presence and online purchase convenience is discussed since it affects consumers' sense of purchase intention. The result shows that when there is no button, participants who read a text have a higher level of purchase intention than those who watched a video and, when the content is delivered by text, the no button group has a higher level of purchase intention than the button group. The empirical findings suggest that in order to engage more customers on the social commerce platform, text format of contents may be more practical even though videos convey a higher level of social presence than text. According to the study done by Hu & Liu (2012), short texts play a very important role in social media. Textual data allows

consumers to learn about products in a short time and is more time efficient for businesses than making videos, which is good news for both parties. Brands that promote on RED can put more efforts into text editing. This result may also be helpful as a reference to other social e-commerce platforms.

Finally, based on the research of Herrando, Jiménez-Martínez, & Martín-De Hoyos (2016), this study proposed that sPassion is the cornerstone of the engagement-generation process and that it mediates the interactive effect of social presence and online purchase convenience. However, the interactive effect of social presence and online purchase convenience in this study is not significant. This may owe to the wording of the sPassion scale. Participants answered the questions about passion after watching the video or reading the text, and the items of the sPassion scale are supposed to be related to the video and the text such as "*I am motivated by the video (or the text) because I am passionate about it.*" However, the items used in this study were directly adapted from previous research and participants were asked about their feelings toward the app such as "*I am motivated to participate on this social commerce platform because I am passionate about it.*" The result may be different if some changes are made to the items wording.

10 Implications for Business and Academia

This study has expanded the horizons for both marketers and researchers. The results have managerial implications as knowing how different formats of content convey different levels of social presence and how customer engagement is produced will enable RED or similar apps to understand how to enhance users' participation. Although videos convey more social presence than text, user purchase intention is not significantly different between those exposed to text and those exposed to video. By investigating the factors that are likely to boost consumer experience

with s-commerce, there is an opportunity to understand how to engage customers and improve interaction through social media and channel operations (Schamari & Schaefers, 2015). The format of advertisement is not very important for brands seeking to promote their products. The results show when users read a text about a product, the more convenience they feel, the higher chance they will make a purchase decision. Therefore, the company can simultaneously use more text formats and improve the level of purchase convenience to attract new users. This will provide guidance to social commerce managers for designing more effective websites and allocating resources. Moreover, according to Bianchi et al. (2017), a one-click feature will take advantage of potential buyers go to a site where their transaction can be completed seamlessly. It is meaningful for s-commerce platform to keep this feature.

The literature available related to passion in the e-commerce context focuses on the effects of passion on WOM, and research in other fields is scarce. However, the last stage of the customer engagement process integrates not only WOM but also customer participation (Busalim, Che Hussin & Iahad, 2019). The study of the interaction effect of social presence and purchase convenience on online purchase intention will help market researchers build models to investigate the behaviors of their own customers in this field of digital business and marketing (Bianchi et al., 2017). While existing research shows that video feedback has a larger impact social presence than text due to the richness of the medium in online education industries (Thomas, West & Borup, 2017), this study has extended the research to the social commerce context, thereby opening a new line of research on different formats of content on social commerce platforms. This study also focuses on the interaction effect of social presence and online purchase convenience, which has not been well studied to date. In additional, this is helpful as it is based on study is based on RED—which combines the social networking features like posting and

commenting with e-commerce features such as one-stop shopping—which is different from other social commerce platforms. This study aims to contribute to the research on this new field.

11 Limitation and Future Research

This study is not without limitations. Firstly, the experimental design for online purchase convenience is not ideal; the salient feature of RED is it combines the social networking feature with the e-commerce feature at the same time so that users can purchase directly from the platform. While a "click here to buy" button was designed to represent the online purchase convenience of RED, the result of data analysis shows that all the groups with the button have lower scores than groups without button on purchase convenience scale. Researchers in future studies should consider creating a simple website to simulate the real app, so that participants will not readily perceive the differences. The treatment group will have the feature of one stop shopping while the control group will exclude the purchase option will be excluded and leave all the other displays items the same.

Secondly, the engagement generation process has the two other elements: the interactivity of cognitive stage and the enjoyment of affective stage and this study only uses the simple model and discusses the relationship between social presence, sPassion and online purchase intention. Therefore, it would be meaningful to widen the model and include these two variables in future research. In addition, the items of the sPassion scale in this study are not directly related to the video or the text, and this may have caused the insignificant result. The items of the sPassion scale should be modified before adapting the questionnaire.

This study does not include male users since more than 90% users are female, but there are more than more male users who are engaging with RED. Future studies should consider including both male and female users.

12 Conclusion

This study uses the social commerce app RED as a research object and focuses on how consumers engage with the different formats of content as well as how social commerce companies can engage customers resulting in purchases through improving purchase convenience. This study used a quantitative research method and collected questionnaires through an online questionnaire platform. Results show that different content formats do not have significantly different effects on consumers' online purchase intention. In order to engage more users on the social commerce platform, the marketers can use more text to deliver content and improve the level of purchase convenience. Users' purchase intention will be improved as a result. The interactive effect of social presence and online purchase convenience on online purchase intention is not mediated by sPassion. However, a future study may improve the experimental design to simulate the real app and modify the items adapted from previous research. This study centers on the interactive effect of social presence and online purchase convenience and opens a new line of research on different formats of content on social commerce platforms. This study also provides practical implications for business: companies can format of content as text and improve online purchase convenience to attract new users. This will help social commerce managers design more effective websites and allocate resources and efforts more effectively.

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Appendix A: Questionnaire

Instructions: Nowadays online shopping is quite common in people's daily life. In this study, you will watch a video or read a text of a skin care product. The video or the text will cost you around five minutes. You cannot close or skip the whole video during experiment. After watching video or reading the text, you will complete the questionnaire about your purchase intention towards the product.

Video or Text

Based on the video you just watched or the text you just read, please answer the following questions:

All scales are seven-point Likert scale, 1 is strongly disagree and 7 is strongly agree.

SP1 There is a sense of human contact on this social commerce website

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

SP2 There is a sense of sociability on this social commerce website

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

SP3 There is a sense of human warmth on this social commerce website

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

PC1 The website is user-friendly for making purchases.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

PC2 The website is easy to understand and navigate.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

PC3 I am able to complete my purchases without difficulty.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

PI1 I would probably think about purchasing this product.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

PI2 I would probably think about shopping at this website.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

PI3 If I need a product in the future, I would like to buy it on this website.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

PI4 I would encourage others to shop online at this website.

Strongly Disagree Strongly Agree

1 2 3 4 5 6 7

sPASS1 I am motivated to participate on this social commerce website because I am passionate about it

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

sPASS2 I participate on this social commerce website because I care about it

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

sPASS3 My passion for this social commerce website's products makes me want to participate in its community

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

sPASS4 I like participating on this social commerce website because I can use my experience to help other people

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

sPASS5 I really like helping other users with their questions

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

sPASS6 I feel good when I can help answer other users' questions

Strongly disagree Strongly Agree

1 2 3 4 5 6 7

Demographic information:

Age: Under 18 18-24 25-34 35 and older

Education: Less than high school

High school graduate

College

Bachelor's degree

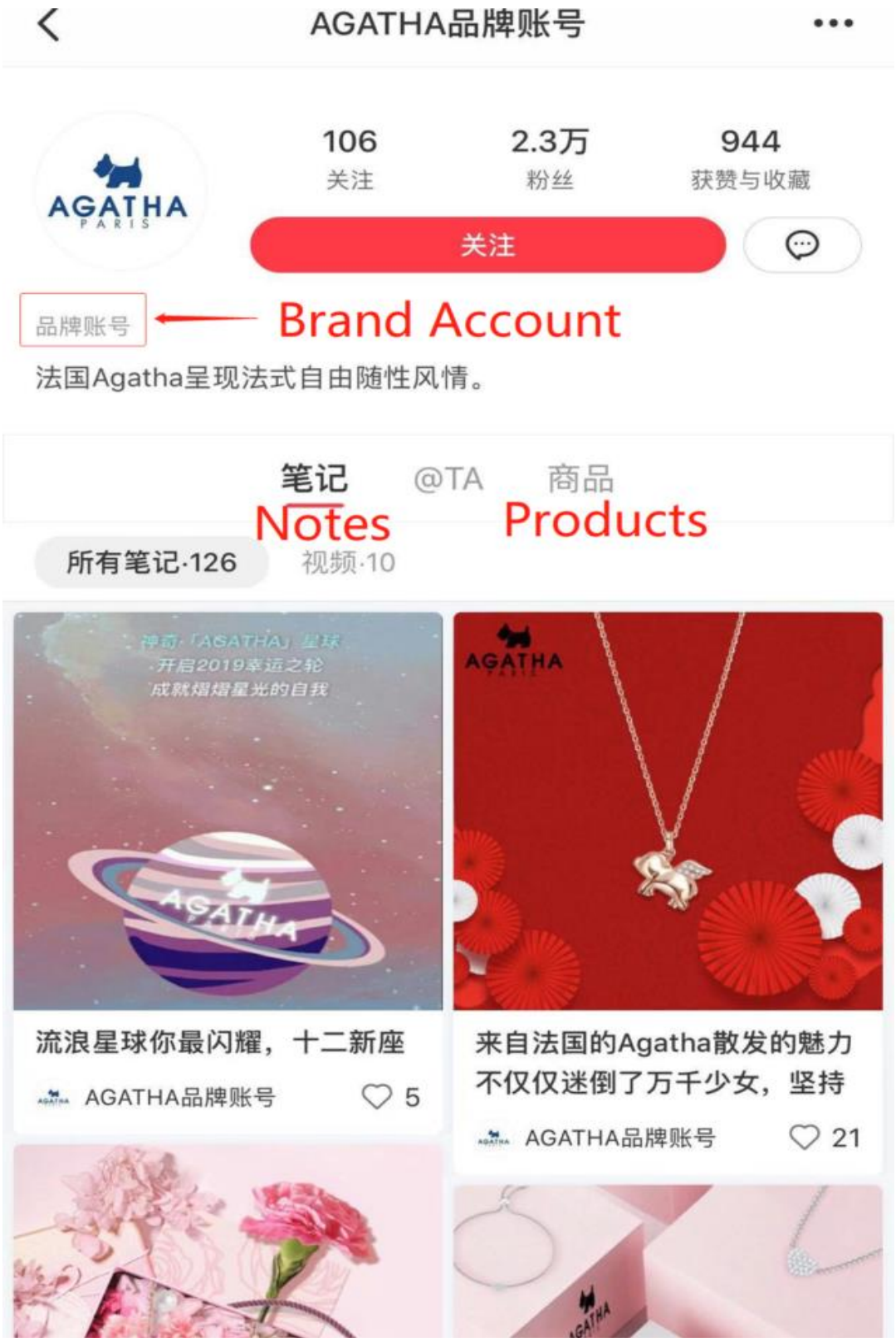
Graduate degree

Note: the abbreviation in front of the questions indicates different variables in the study. SP indicates social presence, sPass indicates sPassion (passion under the social commerce context), PC indicates purchase convenience and PI indicates purchase intention.

Appendix B: Figures

Figure 1 RED, APP Interface

Figure 2 Official account from French brand AGATHA on RED



Appendeix C: SPSS Results

Table 1 Descriptive Data for Social Presence Between User and Non-User

	User or Non-User			Statistic	Std. Error
Social presence	Non-User	Mean		4.47	.184
		95% Confidence Interval for Mean	Lower Bound	4.10	
			Upper Bound	4.85	
		5% Trimmed Mean		4.47	
		Median		4.50	
		Variance		1.283	
		Std. Deviation		1.133	
		Minimum		2	
		Maximum		7	
		Range		5	
		Interquartile Range		1	
		Skewness		.010	.383
		Kurtosis		-.455	.750
	User	Mean		5.05	.082
		95% Confidence Interval for Mean	Lower Bound	4.89	
			Upper Bound	5.21	
		5% Trimmed Mean		5.08	
		Median		5.00	
		Variance		1.417	
		Std. Deviation		1.190	
		Minimum		2	
		Maximum		7	
		Range		5	
		Interquartile Range		2	
		Skewness		-.338	.167
		Kurtosis		.354	.332

Table 2 Descriptive Data for Purchase Convenience Between User and Non-User

	User or Non-User			Statistic	Std. Error
Online Purchase Convenience	Non-User	Mean		5.18	.272
		95% Confidence Interval for Mean	Lower Bound	4.63	
			Upper Bound	5.73	
		5% Trimmed Mean		5.29	
		Median		6.00	
		Variance		2.803	
		Std. Deviation		1.674	
		Minimum		1	
		Maximum		7	
		Range		6	
		Interquartile Range		2	
		Skewness		-.927	.383
		Kurtosis		-.086	.750
	User	Mean		5.70	.073
		95% Confidence Interval for Mean	Lower Bound	5.56	
			Upper Bound	5.84	
		5% Trimmed Mean		5.77	
		Median		6.00	
		Variance		1.126	
		Std. Deviation		1.061	
		Minimum		2	
		Maximum		7	
		Range		5	
		Interquartile Range		1	
		Skewness		-.880	.167
		Kurtosis		.512	.332

Table 3 Descriptive Data for Social Presence Between Video and Text

Dependent Variable: Social Presence

Videotext	Mean	Std. Deviation	N
Text	4.70	1.16	775
Video	4.90	1.13	775
Total	4.80	1.15	1530

Table 4 Descriptive Data for Purchase Convenience Between Button and No Button

Dependent Variable: Purchase Convenience

Video/text	Mean	Std. Deviation	N
No Button	5.50	.96	775
Button	5.41	1.01	775
Total	5.46	.99	1530

Table 5 Descriptive Data for 3-way ANCOVA

Dependent Variable: Purchase Intention

Videotext	User or Non-User	Button or No Button	Mean	Std. Deviation	N
Text	User	No Button	5.26	1.02	204
		Button	5.14	1.00	179
		Total	5.21	1.01	383
	Non-User	No Button	5.19	.93	203
		Button	4.78	1.09	189
		Total	4.99	1.03	392
	Total	No Button	5.23	.97	407
		Button	4.96	1.06	368
		Total	5.10	1.03	775
Video	User	No Button	5.16	1.06	189
		Button	5.11	1.05	193
		Total	5.13	1.05	382
	Non-User	No Button	4.95	.95	178
		Button	4.96	1.05	195
		Total	4.96	1.01	373
	Total	No Button	5.06	1.01	367
		Button	5.04	1.05	388
		Total	5.05	1.03	755
Total	User	No Button	5.21	1.04	393
		Button	5.12	1.02	372
		Total	5.17	1.03	765
	Non-User	No Button	5.08	.95	381
		Button	4.87	1.08	384
		Total	4.98	1.02	765
	Total	No Button	5.15	1.00	774
		Button	4.50	1.06	756
		Total	5.07	1.03	1530

Table 6 Descriptive Data for Purchase Intention Between Video and Text

Dependent Variable: Purchase Intention

Videotext	Mean	Std. Deviation	N
Text	5.10	1.03	775
Video	5.05	1.03	775
Total	5.07	1.03	1530

Table 7 Descriptive Data for 2-way ANCOVA

Dependent Variable: Purchase Intention

Videotext	Button	Mean	Std. Deviation	N
Text	No Button	5.23	.97	407
	Button	4.96	1.06	368
	Total	5.10	1.23	775
Video	No Button	5.06	1.01	367
	Button	5.04	1.05	388
	Total	5.05	1.03	755
Total	No Button	5.15	.99	774
	Button	5.00	1.06	756
	Total	5.07	1.03	1530